

AMENDMENTS TO THE CLAIMS

Please replace all prior versions of the claims with the following listing of the claims. Please note that in the amendments to the claims, deletions are indicated by strikethrough (e.g. ~~deletion~~) and additions to the claims are underlined (e.g. addition).

1. **(Previously presented)** A dental implant for supporting a dental restoration in a jawbone, the dental implant comprising:

a body extending along a longitudinal axis and having a coronal end and an apical end, the coronal end forming, in part, a coronal surface that extends generally transverse to the longitudinal axis and the apical end, in part, forming an annular surface that extends generally transverse to the longitudinal axis;

an external surface extending between the coronal surface and the annular surface and generally facing away from the longitudinal axis of the dental implant, the external surface including a threaded surface that extends substantially to the apical end of the body;

a first inner surface concentric with the external surface, the first inner surface generally facing toward the longitudinal axis of the dental implant, at least a portion of the first inner surface including internal grooves; and

a second inner surface that intersects with the first inner surface along an outer circumference of the second inner surface and extends generally transverse to the longitudinal axis of the dental implant and faces in a generally apical direction.

2. **(Previously presented)** The dental implant according to claim 1, further comprising a stop mark disposed along the external surface for defining an end position for the dental implant at insertion into the jawbone wherein the stop mark is formed by a shoulder which can be engaged with the bone tissue.

3. **(Previously presented)** The dental implant according to claim 2 wherein the shoulder is formed by the end wall portion.

4. **(Previously presented)** The dental implant according to claim 3, wherein the shoulder is formed toward the coronal end.

5. **(Canceled)**

6. (Previously presented) The dental implant according to claim 1 wherein the threaded surface includes double threading.

7-16. (Canceled)

17. (Previously presented) The dental implant according to claim 1, wherein the internal grooves on the first inner surface form a threaded surface.

18. (Canceled)

19. (Canceled)

20. (Previously presented) The dental implant according to claim 1, wherein the internal grooves are micro threads.

21. (Previously presented) The dental implant according to claim 1, in combination with a trephine drill.

22. (Previously presented) The dental implant according to claim 1, wherein the internal grooves extend in a vertical direction parallel to the longitudinal axis.

23. (Currently amended) A dental implant for supporting a dental restoration in a jawbone, the dental implant comprising:

a body extending along a longitudinal axis and having a coronal end and an apical end, the coronal end forming, in part, a coronal surface that extends generally transverse to the longitudinal axis and the apical end, in part, forming an annular surface that extends generally transverse to the longitudinal axis;

an external surface extending between the coronal surface and the annular surface and generally facing away from the longitudinal axis of the dental implant, the external surface including threads that ~~extends~~ extend along the external surface in about a longitudinal axis of the implant direction;

a first inner surface concentric with the external surface, the first inner surface generally facing toward the longitudinal axis of the dental implant, at least a portion of the first inner surface including grooves that form a grooved surface; and

a second inner surface that intersects with the first inner surface along an outer circumference of the second inner surface and extends generally transverse to the longitudinal axis of the dental implant and faces in a generally apical direction;

wherein the threads on the external surface ~~extends~~ extend longitudinally ~~towards~~ to the apical end of the dental implant and the grooved surface extends longitudinally from the apical end toward the coronal end of the dental implant, wherein at least a portion of the threads on the external surface overlap at least a portion of the grooves on the first inner surface in the longitudinal direction.

24. **(Previously presented)** The dental implant according to claim 23, further comprising a stop mark disposed along the external surface for defining an end position for the dental implant at insertion into the jawbone wherein the stop mark is formed by a shoulder which can be engaged with the bone tissue.

25. **(Previously presented)** The dental implant according to claim 24 wherein the shoulder is formed by the end wall portion.

26. **(Previously presented)** The dental implant according to claim 25, wherein the shoulder is formed toward the coronal end

27. **(Previously presented)** The dental implant according to claim 23 wherein the threads on the external surface includes double threading.

28. **(Canceled)**

29. **(Canceled)**

30. **(Canceled)**

31. **(Previously presented)** The dental implant according to claim 23, wherein grooves on the first inner surface form a threaded surface.

32. **(Canceled)**

33. **(Canceled)**

34. **(Previously presented)** The dental implant according to claim 23, wherein the grooves are micro threads.

35. **(Previously presented)** The dental implant according to claim 23, in combination with a trephine drill.

36. **(Previously presented)** The dental implant according to claim 23, wherein the grooves extend in a vertical direction parallel to the longitudinal axis.

37. **(Previously presented)** The dental implant according to Claim 1, in combination with a dental component.

38. **(Previously presented)** The dental implant according to Claim 37, wherein the dental component is a tooth prosthesis.

39. **(Previously presented)** The dental implant according to Claim 37, wherein the dental component is a crown.

40. **(Canceled)**

41. **(Previously presented)** The dental implant according to Claim 37, wherein the dental component is a prosthetic component.

42. **(Canceled)**

43. **(Previously presented)** The dental implant of Claim 1, wherein the implant has a length of between about 2 to about 16 millimeters.

44. **(Previously presented)** The dental implant of Claim 1, wherein the implant has a length of between about 3 to about 8 millimeters.

45. **(Previously presented)** The dental implant of Claim 1, wherein the first inner surface has a cone shape.

46. **(Previously presented)** The dental implant of Claim 1, wherein the first inner surface has a cylindrical shape.

47. **(Previously presented)** The dental implant of Claim 1, wherein the external surface includes a side surface between the threaded surface and the coronal end.

48. **(Previously presented)** The dental implant of Claim 47, wherein the side surface includes grooves or ridges.

49. **(Previously presented)** The dental implant of Claim 1, wherein the grooves are horizontal.

50. **(Canceled)**

51. **(Previously presented)** The dental implant according to Claim 23, in combination with a dental component.

52. **(Previously presented)** The dental implant according to Claim 51, wherein the dental component is a crown.

53. **(Canceled)**

54. **(Previously presented)** The dental implant according to Claim 51, wherein the dental component is a tooth prosthesis.

55. **(Previously presented)** The dental implant according to Claim 51, wherein the dental component is a prosthetic component.

56. **(Canceled)**

57. **(Previously presented)** The dental implant of Claim 23, wherein the implant has a length of between about 2 to about 16 millimeters.

58. **(Previously presented)** The dental implant of Claim 23, wherein the implant has a length of between about 3 to about 8 millimeters.

59. **(Previously presented)** The dental implant of Claim 23, wherein the first inner surface has a cone shape.

60. **(Previously presented)** The dental implant of Claim 23, wherein the first inner surface has a cylindrical shape.

61. **(Previously presented)** The dental implant of Claim 23, wherein the external surface includes a side surface between the threaded surface and the coronal end.

62. **(Previously presented)** The dental implant of Claim 61, wherein the side surface includes grooves or ridges.

63. **(Previously presented)** The dental implant of Claim 23, wherein the grooves are horizontal.

64. **(Canceled)**

65. **(Currently amended)** A dental implant for supporting a dental restoration in a jawbone, the dental implant comprising:

a body extending along a longitudinal axis and having a coronal end and an apical end, the coronal end forming, in part, a coronal surface that extends generally transverse to the longitudinal axis and the apical end, in part, forming an annular surface that extends generally transverse to the longitudinal axis;

an external surface extending between the coronal surface and the annular surface and generally facing away from the longitudinal axis of the dental implant, the external surface including threads that extend along the external surface ~~in~~ around a longitudinal axis of the implant ~~direction~~;

a first inner surface concentric with the external surface, the first inner surface generally facing toward the longitudinal axis of the dental implant, at least a portion of the first inner surface including grooves that form a grooved surface;

a second inner surface that intersects with the first inner surface along an outer circumference of the second inner surface and extends generally transverse to the longitudinal axis of the dental implant and faces in a generally apical direction;

a third inner surface concentric with the external surface, the third inner surface generally facing toward the longitudinal axis of the dental implant, at least a portion of the third inner surface including threads; and

a fourth inner surface that intersects with the third inner surface along an outer circumference of the fourth inner surface and extends generally transverse to the longitudinal axis of the dental implant and faces in a generally coronal direction.

66. **(Previously presented)** The dental implant according to Claim 65, further comprising a stop mark disposed along the external surface for defining an end position for the dental implant at insertion into the jawbone wherein the stop mark is formed by a shoulder which can be engaged with the bone tissue.

67. **(Previously presented)** The dental implant according to Claim 66, wherein the shoulder is formed by the end wall portion.

68. **(Previously presented)** The dental implant according to Claim 67, wherein the shoulder is formed toward the coronal end.

69. **(Previously presented)** The dental implant according to Claim 65, wherein the threads on the external surface includes double threading.

70. **(Canceled)**

71. **(Previously presented)** The dental implant according to Claim 65, wherein the length of the implant is substantially equal to the diameter.

72. **(Previously presented)** The dental implant according to Claim 65, wherein the implant has a diameter, which is larger than its length.

73. **(Previously presented)** The dental implant according to Claim 65, wherein grooves on the first inner surface form a threaded surface.

74. **(Canceled)**

75. **(Previously presented)** The dental implant according to Claim 73, wherein the threads on the first inner surface are micro threads.

76. **(Previously presented)** The dental implant according to Claim 65, wherein the grooves are micro threads.

77. **(Previously presented)** The dental implant according to Claim 65, in combination with a trephine drill.

78. **(Previously presented)** The dental implant according to Claim 65, wherein the grooves extend in a vertical direction parallel to the longitudinal axis.

79. **(Previously presented)** The dental implant according to Claim 65, in combination with a dental component.

80. **(Previously presented)** The dental implant according to Claim 79, wherein the dental component is a tooth crown.

81. **(Canceled)**

82. **(Previously presented)** The dental implant according to Claim 79, wherein the dental component is a tooth prosthesis.

83. **(Canceled)**

84. **(Previously presented)** The dental implant of Claim 65, wherein the implant has a length of between about 2 to about 16 millimeters.

85. **(Previously presented)** The dental implant of Claim 65, wherein the implant has a length of between about 3 to about 8 millimeters.

86. **(Previously presented)** The dental implant of Claim 65, wherein the first inner surface has a cone shape.

87. **(Previously presented)** The dental implant of Claim 65, wherein the first inner surface has a cylindrical shape.

88. **(Previously presented)** The dental implant of Claim 65, wherein the external surface includes a side surface between the threaded surface and the coronal end.

89. **(Previously presented)** The dental implant of Claim 88, wherein the side surface includes grooves or ridges.

90. **(Previously presented)** The dental implant of Claim 65, wherein the grooves are horizontal.

Application No.: 10/591,372
Filing Date: June 25, 2007

91. (Canceled)